

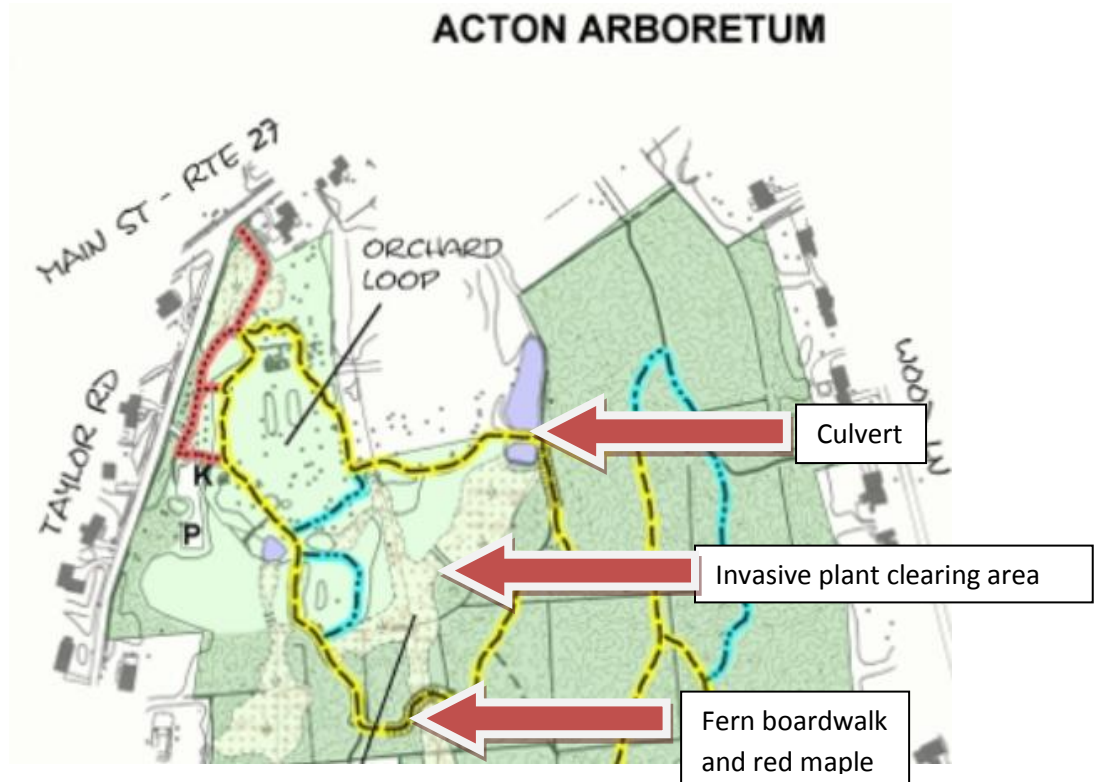
## Notice of Intent

### Acton Arboretum Fern Boardwalk Replacement, Concrete Culvert Replacement, Invasive Plant Removal

#### Project Narrative

This project has three components:

1. Demolish and replace fern boardwalk and remove a dying red maple
2. Remove and replace concrete culvert between twin ponds
3. Remove invasive honeysuckle and multi-flora rose



#### Description of process:

1. Fern boardwalk replacement

The current 20 year old fern boardwalk has rotted and is declining. Professional carpenters will rebuild it.



Volunteers will disassemble the boardwalk by standing on the boardwalk to take it apart, and passing the lumber pieces back to other volunteers in a line, who will put the old lumber into a waiting Natural Resources dump truck. Volunteers will stand in space previously occupied by the boardwalk, not on the sides; and will make reasonable best efforts not to step on the ferns, woody plants and wildflowers growing alongside the trail. The brook that flows under the bridge has many large rocks in it. The bank width is at maximum 36" wide and 6" deep.

When the new boardwalk is reconstructed, carpenters will make reasonable best efforts not to disturb the plantings. The new boardwalk will be built similarly as the wildflower boardwalk was rebuilt in 2013. Concrete footings will be replaced as needed. Sauno tubes will be used to contain the concrete. No sediment will be allowed to flow into the stream.

The dying maple tree will be felled by tree truck with bucket and left in place to decay naturally. The cut up tree will not lie in the stream bed.

2. Concrete culvert between twin ponds - removal and replacement.

A cofferdam (temporary enclosure made of sandbags) will be built across the upper northern pond, isolating and containing the water to that pond. This will allow the enclosed area to drain from the culvert area to the pond below, creating a dry work environment for the major work to proceed.

Lower Pond-  
Arboretum property



Upper pond – Private

**Photos of intact portion of upper pond culvert:**



**Photos of crumbling portion of lower pond culvert:**



### 3. Invasive species removal

The area between the fern boardwalk and the twin ponds has a drainage ditch flowing through it. The area is representative of what the formal Arboretum area looked like prior to development in the late 1980s. There are a few old apple trees and most of the groundcover consists of grasses, forbs, poison ivy (*Rhus radicans*), gray dogwood (*Cornus racemosa*), and multiflora rose (*Rosa multiflora*) and Japanese Morrow Honeysuckle (*Lonicera morrowii*). The wet areas contain a number of pole size American elms (*Ulmus Americana*); unfortunately several of which have contracted Dutch elm disease (*Ceratosystis ulmii*). Several decrepit, overgrown weeping willows (*Salix sp*) are located near the small farm ponds. Red maple (*Acer rubrum*), some mature Eastern white pine (*Pinus strobus*) and many black walnut also abound. The understory is 90% honeysuckle and multiflora rose. Volunteers would cut the honeysuckle and multiflora rose at their base. Volunteers will either dig out the roots; or a town staff member who is a state certified applicator will paint the stumps with herbicide. Brush will either decay in place or volunteers will hand carry to brush/burn pile. Native seeds and shrub species will be planted in place of these non-native invasive shrubs.